

APPROVED	O. G. FIG.
EY	CLASS/SUBCLASS
DRAFTSMAN	

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1 AAAAAGAAAG GAAGAAAATG GAAATACAAC AAACACACCG CAAAATCAAT
51 CGCCCTCTGG TTTCTCTCGC TTTAGTAGGA GCATTAGTCA GCATCACACC
101 GCAACAAAGT CATGCCGCCT TTTTCACAAC CGTGATCATT CCAGCCATTG
151 TTGGGGGTAT CGCTACAGGC ACCGCTGTAG GAACGGTCTC AGGGCTTCTT
201 AGCTGGGGGC TCAAACAAGC CGAAGAAGCC AATAAAACCC CAGATAAACC
251 CGATAAAGTT TGGCGCATT C AAGCAGGAAA AGGCTTTAAT GAATTCCCTA
301 ACAAGGAATA CGACTTATAC AGATCCCTTT TATCCAGTAA GATTGATGGA
351 GGTGGGGATT GGGGGAATGC CGCTAGGCAT TATTGGGTCA AAGGCGGGCA
401 ACAGAATAAG CTTGAAGTGG ATATGAAAGA CGCTGTAGGG ACTTATACCT
451 TATCAGGGCT TAGAACTTT ACTGGTGGGG ATTTAGATGT CAATATGCAA
501 AAAGCCACTT TACGCTTGGG CCAATTCAAT GGCAATTCTT TTACAAGCTA
551 TAAGGATAGT GCTGATCGCA CCACGAGAGT GATTTCAACG CTAAAAATAT
601 CTCAATTGAT AATTTTGCAG AAATCAACAA CTCGTGTGGG TTCTGGAGCC
651 GGGAGGAAAG CCAGCTCTAC GGTTTTGACT TTGCAAGCTT CAGAAGGGAT
701 CACTAGCGAT AAAAACGCTG AAATTTCTCT TTATGATGGT GCCACGCTCA
751 ATTTGGCTTC AAGCAGCGTT AAATTAATGG GTAATGTGTG GATGGGCCGT
801 TTGCAATACG TGGGAGCGTA TTTGGCCCCT TCATACAGCA CGATAAACAC
851 TTCAAAAGTA ACAGGGGAAG TGAATTTTAA CCACCTCACT GTTGGCGATA
901 AAAACGCCGC TCAAGCGGGC ATTATCGCTA ATAAAAAGAC TAATATTGGC
951 AACTGGATT TGTGGCAAAG CGCCGGGTTA AACATTATCG CTCCTCCAGA
1001 AGGTGGCTAT AAGGATAAAC CCAATAATAC CCCTTCTCAA AGTGGTGCTA
1051 AAAACGACAA AAATGAAAGC GCTAAAAACG ACAAACAAGA GAGCAGTCAA
1101 AATAATAGTA AACTCAGGT CATTAAACCA CCCAATAGTG CGCAAAAAAC
1151 AGAAGTTCAA CCCACGCAAG TCATTGATGG GCCTTTTGCG GGCGGCAAAG
1201 ACACGGTTGT CAATATCAAC CGCATCAACA CTAACGCTGA TGGCAGGATT
1251 AGAGTGGGAG GGTTTAAAGC TTCTCTTACC ACCAATGCGG CTCATTTGCA
1301 TATCGGCAAA GCGGGTGTCA ATCTGTCCAA TCAAGCGAGC GGGCGCTCTC

FIG. 1A

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1351 TTATAGTGGA AAATCTAACT GGAATATCA CCGTTGATGG GCCTTTAAGA
1401 GTGAATAATC AAGTGGGTGG CTATGCTTTG GCAGGATCAA GCGCGAATTT
1451 TGAGTTTAAAG GCTGGTACGG ATACCAAAAA CGGCACAGCC ACTTTTAATA
1501 ACGATATTAG TCTGGGAAGA TTTGTGAATT TAAAGGTGGA TGCTCATACA
1551 GCTAATTTTA AAGGTATTGA TACGGGTAAT GGTGGTTTCA ACACCTTAGA
1601 TTTTAGTGGC GTTACAGACA AAGTCAATAT CAACAAGCTC ATTACGGCTT
1651 CCACTAATGT GGCCGTAAA AACTTCAACA TTAATGAATT GATTGTAAA
1701 ACCAATGGGA TAAGTGTGGG GGAATATACT CATTTTAGCG AAGATATAGG
1751 CAGTCAATCG CGCATCAATA CCGTGCGTTT GGAAACTGGC ACTAGGTCAC
1801 TTTTCTCTGG GGGTGTTAAA TTAAAGGTG GCGAAAAATT GGTTATAGAT
1851 GAGTTTTACT ATAGCCCTTG GAATTATTTT GACGCTAGAA ATATTAATAA
1901 TGTTGAAATC ACCAATAAAC TTGCTTTTGG ACCTCAAGGA AGTCCTTGGG
1951 GCACATCAAA ACTTATGTTC AATAATCTAA CCCTAGGTCA AAATGCGGTC
2001 ATGGATTATA GCCAATTTTT AAATTTAACC ATTCAAGGGG ATTTTCATCA
2051 CAATCAAGGC ACTATCAACT ATCTGGTCCG AGGTGGGAAA GTGGCAACCT
2101 TAAGCGTAGG CAATGCAGCA GCTATGATGT TTAATAATGA TATAGACAGC
2151 GCGACCGGAT TTTACAAACC GTCATCAAG ATTAACAGCG CTCAAGATCT
2201 CATTAAAAAT ACAGAACATG TTTTATTGAA AGCGAAAATC ATTGGTTATG
2251 GTAATGTTTC TACAGGTACC AATGGCATTG GTAATGTTAA TCTAGAAGAG
2301 CAATTCAAAG AGCGCCTAGC CCTTTATAAC AACAATAACC GCATGGATAC
2351 TTGTGTGGTG CGAAATACTG ATGACATTAA AGCATGCGGT ATGGCTATCG
2401 GCGATCAAAG CATGGTGAAC AACCTGACA ATTACAAGTA TCTTATCGGT
2451 AAGGCATGGA AAAATATAGG GATCAGCAAA ACAGCTAATG GCTCTAAAT
2501 TTCGGTGTAT TATTTAGGCA ATTCTACGCC TACTGAGAAT GGTGGCAATA
2551 CCACAAATTT ACCCACAAC ACCACTAGCA ATGCACGTTC TGCCAACAAC
2601 GCCCTTGCAC AAAACGCTCC TTTGCTCAA CCTAGTGCTA CTCCTAATTT
2651 AGTCGCTATC AATCAGCATG ATTTTGGCAC TATTGAAAGC GTGTTTGAAT

FIG. 1B

APPROVED	D.G. FIG.	
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2701 TGGCTAACCG CTCTAAAGAT ATTGACACGC TTTATGCTAA CTCAGGCGCT
2751 CAAGGCAGGG ATCTCTTACA AACCTTATTG ATTGATAGCC ATGATGCGGG
2801 TTATGCCAGA AAAATGATTG ATGCTACAAG CGCTAATGAA ATCACCAAGC
2851 AATTGAATAC GGCCACTACC ACTTTAAACA ACATAGCCAG TTTAGAGCAT
2901 AAAACCAGCG GCTTACAAAC TTTGAGCTTG AGTAATGCGA TGATTTTAAA
2951 TTCTCGTTTA GTCAATCTCT CCAGGAGACA CACCAACCAT ATTGACTCGT
3001 TCGCCAAACG CTTACAAGCT TTAAGAGACC AAAAATTCGC TTCTTTAGAA
3051 AGCGCGGCAG AAGTGTTGTA TCAATTTGCC CCTAAATATG AAAACCTAC
3101 CAATGTTTGG GCTAACGCTA TTGGGGGAAC GAGCTTGAAT AATGGCTCTA
3151 ACGCTTCATT GTATGGCACA AGCGCGGGCG TAGACGCTTA CCTTAACGGG
3201 CAAGTGGAAG CCATTGTGGG CGGTTTTGGA AGCTATGGTT ATAGCTCTTT
3251 TAATAATCGT GCGAACTCCC TTAAGTCTGG GGCCAATAAC ACTAATTTTG
3301 GCGTGTATAG CCGTATTTTA ACCAACCAGC ATGAATTTGA CTTTGAAGCT
3351 CAAGGGGCAC TAGGGAGCGA TCAATCAAGC TTGAATTTCA AAAGCGCTCT
3401 ATTACAAGAT TTGAATCAAA GCTATCATT CTTAGCCTAT AGCGCTGCAA
3451 CAAGAGCGAG CTATGGTTAT GACTTCGCGT TTTTATAGGAA CGCTTTAGTG
3501 TTAAGACCAA GCGTGGGTGT GAGCTATAAC CATTTAGGTT CAACCAACTT
3551 TAAAGCAAC AGCACCAATC AAGTGGCTTT GAAAAATGGC TCTAGCAGTC
3601 AGCATTTATT CAACGCTAGC GCTAATGTGG AAGCGCGCTA TTATTATGGG
3651 GACACTTCAT ACTTCTACAT GAATGCTGGA GTTTTACAAG AGTTCGCTCA
3701 TGTTGGCTCT AATAACGCCG CGTCTTTAAA CACCTTTAAA GTGAATGCCG
3751 CTCGCAACCC TTAAATACC CATGCCAGAG TGATGATGGG TGGGGAATTA
3801 AAATTAGCTA AAGAAGTGTT TTTGAATTTG GGC GTTGT TTTATGCACAA
3851 TTTGATTTCC AATATAGGCC ATTCGCTTC CAATTTAGGA ATGAGGTATA
3901 GTTTCTAAAT ACCGCTCTTA AACCCATGCT CAAAGCATGG GTTTGAAATC
3951 TTACAAAACA

FIG. 1C

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1 MEIQQTHRKI NRPLVSLALV GALVSITPQQ SHAAFFTTVI IPAIVGGIAT
 51 GTAVGTVSGL LSWGLKQAE E ANKTPDKPDK VWRIQAGKGF NEFPNKEYDL
 101 YRLLSSKID GGWDWGNAAR HYWVKGGQQN KLEVDMKDAV GTYTL SGLRN
 151 FTGGDL DVM QKATLRLGQF NGNSFTSYKD SADRTTRVIS TLKISQLIIL
 201 QKSTTRVGS G AGRKASSTVL TLQASEGITS DKNAEISLYD GATLNLASSS
 251 VKLMGNVWMG RLQYVGAYLA PSYSTINTSK VTGEVNFNHL TVGDKNAAQA
 301 GIIANKKTN I GTLDLWQSAG LNIIAPPEGG YKDKPNNTPS QSGAKNDKNE
 351 SAKNDKQESS QNNSNTQVIN PPNSAQKTEV OPTQVIDGPF AGGKDTVNI
 401 NRINTNADGT IRVGGFKASL TTNAHLHIG KGGVNL SNQA SGRSLIVENL
 451 TGNITVDGPL RVNNQVGGYA LAGSSANFEE KAGTDTKNGT ATFNNDISLG
 501 RFVNLKVDAH TANFKGIDTG NGGFNTLDFS GVTDKVNINK LITASTNAV
 551 KNFNINELIV KTNGISVGEY THFSEDIGSQ SRINTVRLET GTRSLFSGGV
 601 KFKGGEKLV I DEFYYSPWNY FDARNIKNVE ITNKLAFGPQ GSPWGTSKLM
 651 FNNLT LGQNA VMDYSQFLNL TIQGDFINNG GTINYLV RGG KVATLSVGNA
 701 AAMMFNNDID SATGFYKPLI KINSAQDLIK NTEHVLLKAK IIGYGNVSTG
 751 TNGISNVNLE EQFKERLALY NNNNRMDTCV VRNTDDIKAC GMAIGDQSMV
 801 NNP DNYKYLI GKAWKNIGIS KTANGSKISV YYLGNSTPTE NGGNTTNLPT
 851 N TTSNARSAN NALAQNAPFA QPSATPNLVA INQHDFGTIE SVFELANRSK
 901 DIDTLYANS G AQGRDLLQTL LIDSHDAGYA RKMIDATSAN EITKQLNTAT
 951 TTLNNIASLE HKTSGLQTLS LSNAMILNSR LVNLSRRHTN HIDSFAKRLQ
 1001 ALKDQKFASL ESAAEVLYQF APKYEKPTNV WANAIGGTSL NNGSNASLYG
 1051 TSAGVDAYLN GQVEAIVGGF GSYGYSSFNN RANSLNSGAN NTNFGVYSRI
 1101 LTNQHEFD FE AQGALGSDQS SLNFKSALLQ DLNQSYHYLA YSAATRASYG
 1151 YDFAFFRNAL VLKPSVGVS Y NHLGSTNFKS NSTNQVALKN GSSSQHLFNA
 1201 SANVEARYYY GDTSYFYMNA GVLQEFAHVG SNNAASLNTF KVNAARNPLN
 1251 THARVMMGGE LKLAKEVFLN LGVVYLHNLI SNIGHFASN L GMRYSF

FIG. 2

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FIG. 3
 2248 BI 5925
 2641 AI 3466
 857 64/4 1647 2141 24 2640 2776 G5 3466
 I 57/D 1294 1533 007 2289 2776 AI7 3466

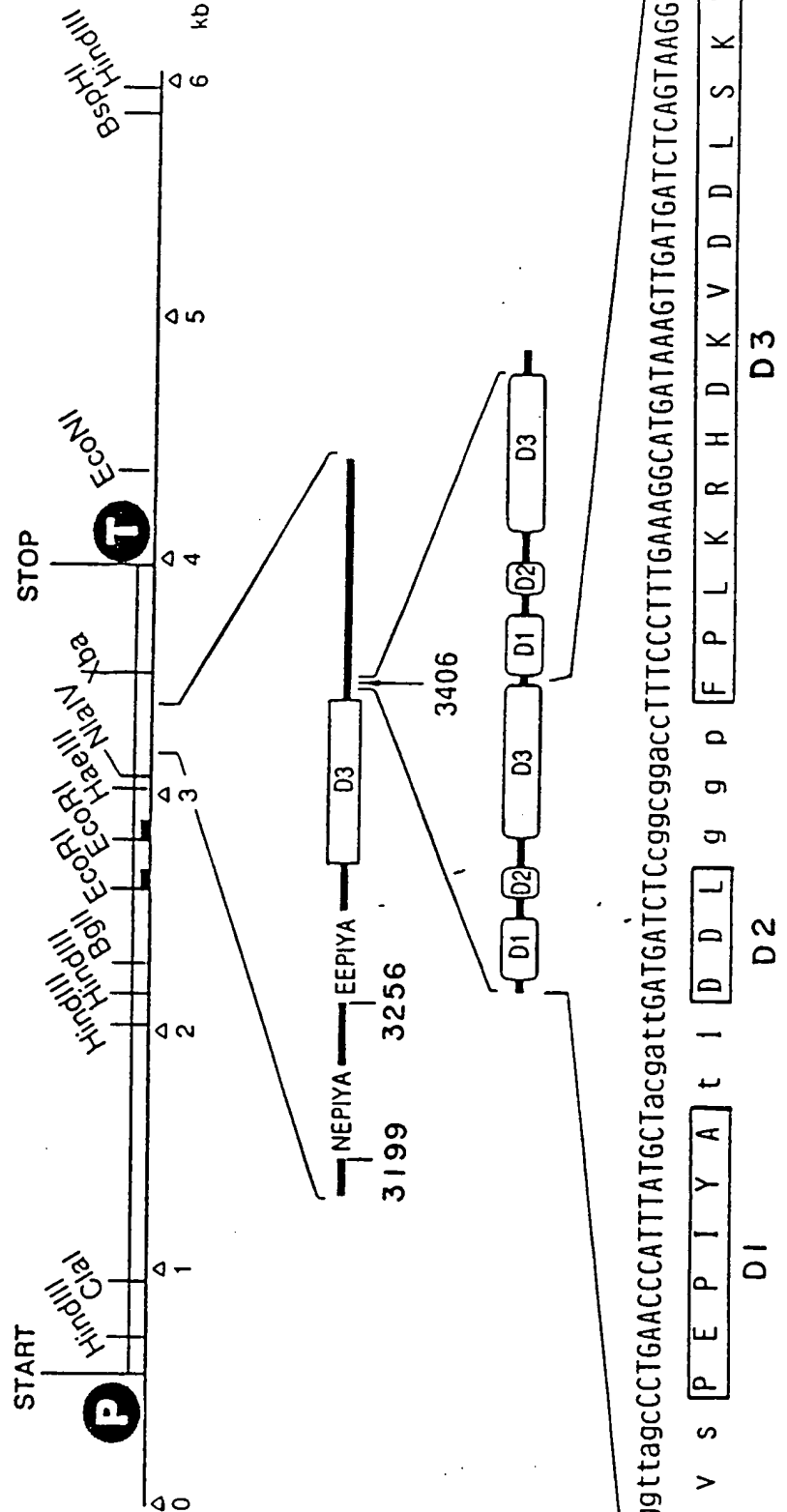


FIG. 4 A

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FIG. 4B

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503 Y S N F K Y T N A S K N P N K G V G V T
TTAATAATCTCGCTACTACTAGTTTCTGTAAGCGGAATTTAGAGGATAAATAACCACT
543 L N N L A I T S F V R R N L E D K L T T
GAATTGGTTGGAAAACTTTAACTTCAATAAAGCTGTAGCTGACGCTAAACACACAGG
583 E L V G K T L N F N K A V A D A K N T G
CATTTAGAGAAAGAGTAGAGAAAAATTGGAGACAAAGCGCACAAAAATAAATA
623 H L E K E V E K K L E S K S G N K N K M
GCTAATAGAGACGCAAGAGCAATCGCTTAGCTCAGAATCTTAAGAGCATCAAAAGGGAA
663 A N R D A R A I A Y A Q N L K G I K R E
GAATTCAAATGGCAAAATAAGGATTTGAGCAAGGCGAGAGAACACTAAAGGCCCT
703 E F K N G K N K D F S K A E E T L K A L
AATGCAGCTTGAATGAATTCAAAAATGGCAAAATAAGGATTTGACGAAGTAAAGCGAA
743 N A A L N E F K N G K N K D F S K V T Q
AAGTTGATAATCTCAATCAAGCGGTATCAGTGGCTAAGCAACGGGTGATTTCAGTAGG
783 K V D N L N Q A V S V A K A T G D F S R
CAAAAAATGAAGTCTCAATGCTAGAAAAAATCTGAATATATCAATCCGTTAAGAAT
823 Q K N E S L N A R K K S E I Y Q S V K N
AAAAACTTTTCGACATCAAGAAAGAGTTGAATCGAAATTCGAATTTCAATATCAAT
863 K N F S D I K K E L N C A K L G N F N N N
CAAGCAGCTAGCTTGAAGAACCCCTTAGCTCAAGTTGCTAAAGAGGTAAATGCAAAA
903 Q A A S L E E P I Y A Q V A K K V N A K
CCTTTGAAAAGGCATGATAAAGTTGATGATCTCAGTAAGGTAGGCGTTTCAAGGAATCA
943 P L K R H D K V D D L S K V G L S R N Q
TTTGGCAATCTAGAGCAACGATAGACAAGTCTCAAAAGATCTACAAAACCAATCCCATG
983 F G N L E Q T I D K L K D S T K H N P M
TAGGCTACTACAGGCACATACGCAATTAATAGCAATATCAAAATGGAGCAATCAATGAA

FIG. 4C

ERSATZBLATT

N G V S H L E V G F N K V A I F N L P D	2280
A A G G A T T G C C C C A C A A G A G C T A A T A G C T T A T C A A G A T T T T T G A G C A G C A A A	
K G L S P Q E A N K L I K D F L S S N K	
A A T T A T G A G T G A A A A A G A G C T C A A A G A T C T T G A A A A T C T C T A A G G A A C G A G A G	2400
N Y D E V K K A Q K D L E K S L R K R E	
G A A G C A A A G C T C A A G T A C A G C C A A A A G A T G A G A T T T T G C G T T G A T C A A T A A G A G	2520
E A K A Q A N S Q K D E I F A L I N K E	
T T G T G T A A A C T T G A A A T G T C A A C A G A A T T T G A A G A C T T T G A T A A T C T T T T G A T	2640
L S D K L E N V N K N L K D F D K S F D	
A A A G G T C G G T G A A A G A T T T A G G T A T C A A T C C A G A T G G A T T C A A A G T T G A A A C C T T	2760
K G S V K D L G I N P E W I S K V E N L	
G C A A A A G C G A C C T T G A A A T T C C G T T A A G A T G T A T C A T C A A T C A A A A G G T A A C G G A T	2880
A K S D L E N S V K D V I I N Q K V T D	
G T A G A C A A G C G T T A G C G A T C T C A A A A T T C T C A A A G G A G C A A T T G G C C C A A C A G C T	3000
V E Q A L A D L K N F S K E Q L A Q Q A	
G G T G T A A T G A A C C C T A G T C G G T A A T G G G T A T C T C A A G C A G G C C A C A A C T T T C T	3120
G V N G T L V G N G L S Q A E A T T L S	
A A C A A T A T G G A C T C A A A A A C G A C C C A T T A T G C T A A G T T A A A A A G A A A G C A G G G	3240
N N N G L K N <u>E P I Y A</u> K V N K K K A G	
A T T A C C G A C T C A A T A A G A A T G A G T T T G G G T T G T A G G C A A G C A G C G G G C T T C	3360
I D R L N Q I A S G L G V V G Q A A G <u>E</u>	
G A A T T G G C T C A G A A A T T G A C A A T C T C A A T C A A G C G G T A T C A G A G C T A A A G C A G G T T T	3480
E L A Q K I D N L N Q A V S E A K A G F	
A A T C T A T G G T T G A A A T G C A A A A A A G T A C C T G C T A G T T T G T C A G C G A A A C T A G A C A A T	3600
N L W V E S A K K V P A S L S A K L D N	
A A A G C G A C C G G C A T G C T A A C G C A A A A A A C C C T G A G T G G C T C A A G C T G T G A A T G A T A A G	3720

FIG. 4D

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1023 Y A T N S H I R I N S N I K N G A I N
ATAGTTGGCATAATGTAGGAAGCGTTCITTTGTCAGAGTATGATAAAATTGGCTTC
1063 I V A H N V G S V P L S E Y D K I G F
GTAAAGACACTAATTCTGCGTTTACGCAATTTTAAACCAATGCATTTTCTACAGCA
1103 V K D T N S G G F T Q F L T N A F S T A
GGTTTCCAAAATCTTAAAGGATTAAAGGAATACCAAAAACGCCAAAACCCACCTTGG
1143 G F Q K S
TGAATGCTACCAATTCATGGTATCATATCCCCATACATTCTGTATCTAGCGTAGGAAG
AACTCTGTAAAATCCCTATTATAGGACACAGGTGAGAACCAAACTCTCCCTACGG
GACAGACACTAAGCAAAGCGTTGTCTTTAAAGTCTGCATGGATTTTCTTACCC
CGAAAATTAAATTAGGGTTATAAGAGAGCATAAACTAGAAAAACAAGTAGCTATA
GAAAAATCAGAAAAACCATAGGAATTATCACACCTTATAATGCCAAAAAAGACGCT
ATGCTTTCAAGGTGAAGAGCGAGATATTATTATTTATTCACCGTGAAACCTTGTG
ATCTCATTTTGTGGGTAAAAAGTCTTTCTTGAGAAATTTATGAAGCGATGAGAAGA
CATCTTCGCTTCAAAACGCTTTCATAAATCTCTTAAAGCGCTTTATAATCAACAC
TTATTAGCGTTACAAATTTGAGCCATCTTTAGCTGTGTTTTCTAGCCAGATCACATC
CTGCAAAATATCTACAAATAGCATGCGCCGAATGGAATGAGTAGGGGGGGTGTGAAAG
TAAATAATCACTTCGGGAAAATCTTTAAGGGAGTGAATAATAACGCATGCAAGTT
TGGCAACATTCAAATAGCCTTGTGTTTTCAGGGCATTTGTCTAAGCGTTGGATTGG
GCTAAAATGCTTGGCTCAATACGCGCCCAACATAGGGATTTTTGGAAATGCTTTTGCATC
TTGAAAAAATCCAAAGCCTCTAAGCCAAATTTGCTTGATCGTAGTGGGGTCTTTAGTG
AGCGCTTTTAAACGCTTAAACCCCTCCACACCGCTATCAAAACGCCATATTTTCATG
TCTTCATTGTCCTTAGTTTGTGCAATTTTAGAATAGACAAAGCTT 5925

FIG. 4E

ERSATZBLATT

E K A T G M L T O K N P E W L K L V N D K
AACCAGAAGATATGAAGATTATTCTGATTCGTTCAAGTTTTCCACCAAGTTGAACAATGCT 3840
N O K N M K D Y S D S F K F S T K L N N A
TCTTATTACTGCTTGCGCAGAGAAAATGCGGAGCATGGAATCAAGAACGTTAATACAAAAGGT 3960
S Y Y C L A R E N A E H G I K N V N T K G
CTAAAGCGAGGGGTTTTTAATACTCTTAGCAGAAATCCCAATCGCTTTTAGTATTGGGA 4080
TGTCAAAAGTTACGCCCTTTGGAGATATGATGTGAGACCTGTAGGGAATGCGTTGGAGCTCA 4200
GCAACATCAGCTTAGGAAGCCCAATCGTCTTTAGCGTTGGCACCTTCACCTTAAATATCCC 4320
AAAAGACTTAACCCCTTGCTTAAAATTAAGTTGATGTGCTAGTGGGTTGCGCTATAGTG 4440
ACAAAGATCAAGTTCAAAAATCATAGAGCTTTTAGAGCAAAATGATCGGCTCTTTAACCCAAA 4560
TGGGATCAGAGTGGAAAAATACGGCTTCAGAAATTTGATGAGCTCAAAATAGACACTGTGG 4680
GTAATCTTCTTCTTGCTAGATCTTAAACGCTTGAATGTGGCTATTTCTAGGGCAAAAGAAA 4800
ATATCTTTAGCGCTATTTTGCAAGCTGTAGATAGTAATCTTTTCCAAAGATAATCATAGA 4920
AATACCTTTATAGTGTGAGCTATAGCCCLTTTGGGAATGAGTTATTTTGACTTTTAAATTT 5040
GCCGCTCGCATGAATTCACCTTTAGGGAATGCGTGTGCATTTTTTTTAAAGGGCGTATTTTG 5160
GGCAAAATGCTCCATAAAATAGCCCTCAATTTTTGAGCGGATTAAGGGAAAATGCGTGCAACC 5280
TCTAACAAATTCGCCCTCTAAATACTTTCTCAATCAAAAGGCACAAAAGAGAAGTGCGCTAAA 5400
ATCGTGCCTTTTGCTCCCTAGCATAAAATAGGGCGCTTTTATCTTTTACTTTGTCGCTGATC 5520
TCTTCTAAAGCTAGAGGCTCGCTGTGTGATGCCACAATCAATAATTCATCTGGTGCGGT 5640
CCATAAGGCACCTCAGCCGATCGCCATAATAGATGATTTTCATCAATAATTCGCGCTTTTAAA 5760
ACACTTTTTTAAATTAATGGGAATTAATAGGGAATTTATTTTTTCATTCATTAAGTTTAAAAAT 5880

FIG. 4 F

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10 30 50
AAGCTTGCTGTCATGATCACAAAAACACTAAAAACATTATTATTAAGGATACAAAATG M
70 90 110
GCAAAAGAAATCAAATTTTCAGATAGTGCGAGAAACCTTTTATTTGAAGGCGTGAGGCAA
A K E I K F S D S A R N L L F E G V R Q
130 150 170
CTCCATGACGCTGTCAAAGTAACCATGGGGCCAAGAGGCAGGAATGTATTGATCCAAAAA
L H D A V K V T M G P R G R N V L I Q K
190 210 230
AGCTATGGCGCTCCAAGCATCACCAAGACGGCGTGAGCGTGGCTAAAGAGATTGAATTA
S Y G A P S I T K D G V S V A K E I E L
250 270 290
AGTTGCCAGTAGCTAACATGGGGCGCTCAACTCGTTAAAGAAGTAGCGAGCAAAACCGCT
S C P V A N M G A Q L V K E V A S K T A
310 330 350
GATGCTGCCGGCGATGGCACGACCACAGCGACCGTGCTAGCTTATAGCATTTTTAAAGAA
D A A G D G T T T A T V L A Y S I F K E
370 390 410
GGTTTGAGGAATATCACGGCTGGGGCTAACCTATTGAAGTGAAACGAGGCATGGATAAA
G L R N I T A G A N P I E V K R G M D K
430 450 470
GCTGCTGAAGCGATCATTAAATGAGCTTAAAAAGCGAGCAAAAAAGTAGGCGGTAAAGAA
A A E A I I N E L K K A S K K V G G K E
490 510 530
GAAATCACCCAAGTGGCGACCATTTCTGCAAACTCCGATCACAATATCGGGAAACTCATC
E I T Q V A T I S A N S D H N I G K L I
550 570 590
GCTGACGCTATGGAAAAAGTGGGTAAAGACGGCGTGATCACCGTTGAGGAAGCTAAGGGC
A D A M E K V G K D G V I T V E E A K G
610 630 650
ATTGAAGATGAATTGGATGTCGTAGAAGGCATGCAATTTGATAGAGGCTACCTCTCCCT
I E D E L D V V E G M Q F D R G Y L S P

FIG. 5A

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670 690 710
TATTTTGTAAACGAACGCTGAGAAAATGACCGCTCAATTGGATAATGCTTACATCCTTTTA
Y F V T N A E K M T A Q L D N A Y I L L
730 750 770
ACGGATAAAAAATCTCTAGCATGAAAGACATTCTCCCGCTACTAGAAAAACCATGAAA
T D K K I S S M K D I L P L L E K T M K

790 810 HindIII
GAGGGCAAACCGCTTTTAAATCATCGCTGAAGACATTGAGGGCGAAGCTTTAACGACTCTA
E G K P L L I I A E D I E G E A L T T L
850 870 890
GTGGTGAATAAATTAAGAGGCGTGTGAATATCGCAGCGGTTAAAGCTCCAGGCTTTGGG
V V N K L R G V L N I A A V K A P G F G
910 930 950
GACAGAAGAAAAGAAATGCTCAAAGACATCGCTATTTTAACCGGCGGTCAAGTCATTAGC
D R R K E M L K D I A I L T G G Q V I S
970 990 1010
GAAGAATTGGGCTTGAGTCTAGAAAACGCTGAAGTGGAGTTTTTAGGCAAAGCTGGAAGG
E E L G L S L E N A E V E F L G K A G R
1030 1050 1070
ATTGTGATTGACAAAGACAACACACGATCGTAGATGGCAAAGGCCATAGCGATGATGTT
I V I D K D N T T I V D G K G H S D D V
1090 1110 1130
AAAGACAGAGTCGCGCAGATCAAAACCCAAATTGCAAGTACGACAAGCGATTATGACAAA
K D R V A Q I K T Q I A S T T S D Y D K
1150 1170 1190
GAAAAATTGCAAGAAAGATTGGCTAAACTCTCTGGCGGTGTGGCTGTGATTAAAGTGGGC
E K L Q E R L A K L S G G V A V I K V G
1210 1230 1250
GCTGCGAGTGAAGTGGAAATGAAAGAGAAAAAAGACCGGGTGGATGACGCGTTGAGCGCG
A A S E V E M K E K K D R V D D A L S A
1270 1290 1310
ACTAAAGCGGCGGTTGAAGAAGGCATTGTGATTGGTGGCGGTGCGGCTCTCATTGCGCGG
T K A A V E E G I V I G G G A A L I R A

FIG. 5B

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1330 1350 1370
GCTCAAAAAGTGCATTTGAATTTGCACGATGATGAAAAAGTGGGCTATGAAATCATCATG
A Q K V H L N L H D D E K V G Y E I I M
1390 1410 1430
CGCGCCATTAAAGCCCCATTAGCTCAAATCGCTATCAACGCTGGTTATGATGGCGGTGTG
R A I K A P L A Q I A I N A G Y D G G V
1450 1470 1490
GTCGTGAATGAAGTAGAAAAACACGAAGGGCATTGTTTAAACGCTAGCAATGGCAAG
V V N E V E K H E G H F G F N A S N G K
1510 1530 1550
TATGTGGATATGTTTAAAGAAGGCATTATTGACCCCTTAAAGTAGAAAGGATCGCTCTA
Y V D M F K E G I I D P L K V E R I A L
1570 1590 1610
CAAAATGCGGTTTCGGTTTCAAGCCTGCTTTTAACCACAGAAGCCACCGTGCATGAAATC
Q N A V S V S S L L L T T E A T V H E I
1630 1650 1670
AAAGAAGAAAAAGCGACTCCGGCAATGCCTGATATGGGTGGCATGGGCGGTATGGGAGGC
K E E K A T P A M P D M G G M G G M G G
1690 1710 1730
ATGGGCGGCATGATGTAAGCCCGCTTGCTTTTTAGTATAATCTGCTTTTAAATCCCTTC
M G G M M *
1750 1770 1790
TCTAAATCCCCCCTTTCTAAATCTCTTTTTGGGGGGGTGCTTTGATAAACCGCTCG
1810 1830
CTTGTA AAAACATGCAACAAAAAATCTCTGTTAAGCTT

FIG. 5C